## REMARKS

**Status of Claims**

The Office Action mailed June 15, 2005 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-43 were pending in the application. Since no claims have been amended, canceled, or newly added, claims 1-43 remain pending in the application.

A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

**Rejection under 35 U.S.C. §112, First Paragraph**

In the office action, the independent claims 1, 16, 30, 34, 36, and 37 are rejected under 35 U.S.C. 112, first paragraph for failing to comply with the written description support of the recited feature "...without any prior knowledge of the area control module..." Applicants respectfully traverse this rejection because this recited feature is adequate supported by page 26 of the specification when read in conjunction with the rest of the specification.

As stated in *Martin v. Johnson*, 454 F.2d 746, 751 (CCPA 1972), there is no requirement that the description (of a claimed feature "be in ipsis verbis (.e., in the same words) to be sufficient." Rather, the courts have stated that each claim limitation must be expressly, implicitly, *or* inherently supported in the originally filed specification. Therefore, it must be shown that "that a person of ordinary skill would have understood, at the time the patent application was filed, that the description requires that limitation. *See Hyatt v. Boone*, 146 F.3d 1348, 1353 (Fed. Cir. 1998) and more generally the discussion in MPEP §2163.

As disclosed in page 26 of the specification,

> ...if a new transceiver 12' is added to the cluster, it will start signaling its presence, because the signal is identified as "new," it is propagated throughout the cluster of transceiver modules 12 until it reaches the area control module 14....The network structure controller 110 of the microprocessor 100 [of the area control module 14] recognizes the new transceiver module 12' and based on an analysis...the preferred or designated path is determined for the new transceiver module 12' [by the area control module].... The definition of this new designated path is further communicated to the

> transceiver module 12'... and signals from the transceiver module 12' are no longer designated as "new."

*See* page 26, lines 10-22 of the specification. This very clearly describes that a newly added module simply transmits an initial signal identified as "new" which is *then propagated throughout the cluster of transceiver modules 12* until it reaches the area control module 14. It would be meaningless to transmit an initial signal throughout the cluster of transceiver modules 12 if the newly added transceiver model had apriori knowledge of the area control module since it would then have identified the known area control module as its destination. Rather, the specification explicitly discloses that it is area control module 14 that recognizes the new transceiver module when the "new" signal works it way after being propagated throughout the cluster of transceiver modules and a designated (or best) path is then subsequently transmitted back to the new transceiver module 12'.

Therefore, this disclosure clearly discloses to one of ordinary skill at least implicitly (if not inherently) that the new transceiver transmits its "new" signal without any relevant knowledge of the area control module. The disclosure in the rest of the specification also supports this feature. For example, on page 22, lines 5-17, the specification discloses that whenever a new transceiver is added or removed, it is the area control module that uses polling to determine any changes and then send path definitions to the transceivers. That is, a new transceiver has no apriori knowledge of the area control module. Rather, the specification clearly discloses that knowledge of the area control module (such as the designated path information) is actually send from the area control module back to the new transceiver which simply initiates its existence by transmitting a new signal to the entire cluster of transceivers. Accordingly, applicants submit that the claimed feature is adequately described in the specification as would be understood by one of ordinary skill in the art even if the exact words are not found in the specification. Accordingly, applicants respectfully submit that this rejection is erroneous and should be withdrawn.

**Prior Art Rejections**

In the Office Action, claims 1-6, 8-12, 16-21, 23-27, 30-36, and 38-41 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,437,692 ("Petite") in view of U.S. Patent No. 6,115,580 ("Chuprun") and U.S. Patent No. 6,536,498 ("Larsson"). Claims 13, 14, 28, 29, 36, 37, 42, and 43 are rejected under 35 U.S.C. §103(a) as being

unpatentable over Petite, Chuprun, and Larsson in further view of U.S. patent application publication no. 2002/0065058 ("Gatherer"). Claims 7, 15, and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Petite, Chuprun, and Larsson in further view of U.S. Patent No. 6,490,459 ("Sugaya"). Applicants respectfully traverse these rejections, insofar as they may be applied to the pending claims, for at least the following reasons.

Each of the independent claims 1, 16, 30, 34, 36, and 37 recite, *inter alia*, a method (or system/network) that relate to a local cluster of working components (each having a low power transceiver module) of a system monitored by a utility and includes the following features:(1) wherein each transceiver unit in a local cluster *itself initiates* determination of an initial best path to the area control module *without any prior knowledge of the area control module*, and (2) each transceiver module initiates transmission of message which is then retransmitted by other transceiver modules in the local cluster each of which makes a decision on whether it is on a best path to the area control module and if so, re-transmitting this message. These features are not disclosed by the applied prior art combination for at least the following reasons.

*First*, each of the independent claims recite that each transceiver unit *itself initiates determination* of an initial best path to the area control module without *any prior knowledge of the area control module*. That is, as described in the specification at page 26, when a new transceiver module is added it initiates the determination of an initial path by signaling a "new" signal with no identified destination node or address. Rather the new signal is propagated until it reaches the area control module 14 which creates the best path for the new transceiver and updates the best paths for other transceivers. Therefore, this claimed feature recites each new transceiver module itself initiates determination of an initial best path by simply transmitting a "new" signal and without any knowledge of its destination (i.e., the area control module).

As acknowledged in the office action, the primary reference Petite does not disclose this claimed feature. The office action relies on Chuprun for disclosing this feature. However, Chuprun relates to relatively sophisticated communication networks in which each node makes a sophisticated determination of a best path to other nodes using a link quality determination unit (54) based on location of nodes and the terrain about the nodes so that a

path selection unit 58 determines an optimal path through the network. Such a sophisticated wireless node would not be suitable for use in the low power transceiver nodes recited in the pending claims or in Petite since it would drastically increase the power requirements and defeat the purpose of the claimed invention. As described in the specification at page 10, lines 3-5, the claimed network for monitoring the working components of a utility is predicated in short distance radio communication at low power levels. Use of the far more sophisticated wireless nodes (with consequent increase in power consumption) taught by Chuprun would defeat the essential purpose of the claimed invention and the low power transceiver system contemplated by Petite. See col. 5, lines 50-53 of Petite which discloses that the "transceivers are preferably RF (Radio Frequency) transceivers, that are relatively small in size and transmit a relatively low power RF signal." Therefore, there is no motivation to combine these references as suggested in the office action since such a combination would change the principle of operation of the Petite system (and also the claimed invention).

The office action also acknowledges that even the combination of Petite and Chuprun does not disclose that each of the transceiver modules make a decision as to whether to re-transmit based on a best path information to the area control module. The office action relies on Larsson for this disclosure. However, it should be noted that Larsson is non-analogous art to the primary Petite reference. One skilled in the art for monitoring systems for utility devices, such as street lighting systems, would not look to solutions in wireless piconet solution provided by Larsson. For example, Larsson discloses that a typical piconet connects only eight devices. *See* col. 1, lines 54-56 of Larsson. Such a small number of devices would be completely unsuitable in the context of monitoring street lights where each local cluster may include hundreds or thousands of working components (street lights). In *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.3d 858 (Fed. Cir. 1993), the Federal Circuit stated that reference to a SIMM in an industrial controller was not necessarily in the same field of endeavor as the claimed SIMMs used in a personal computer even though both related to memories. Therefore, Petite and Larsson are not proper prior art to be applied to the claimed invention since there is no proper motivation to combine these references in the manner proposed.

Rather, it appears that the Office Action pieces together other references without proper motivation and appears to be impermissibly using the applicants' own invention as the map to piece together the references. As the Supreme Court has noted in numerous instances such hindsight reconstruction is an improper basis for judging the patentability of these claims. Furthermore, the Federal Circuit has clarified that the mere fact the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the *desirability* of the *combination*. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). In this regard, the motivation provided in the Office Action focuses on the advantages of each reference separately but does not provide any motivation that suggests the desirability of the *combination*. Since the complex wireless nodes of Chuprun would be undesirable in the low power transceivers proposed by Petite.

**Commercial Success Declaration under 37 C.F.R. §1.132**

The attached declaration under 37 C.F.R. §1.132 attests to a commercial product (sold by Telemics) which embodies the pending independent claims. As stated in the declaration, the product has enjoyed great success since its introduction and currently enjoys a 90% market share for products of its type. Furthermore, the Letter from the City of Los Angeles (a significant purchaser) (hereafter "L.A. Letter") clearly states that they purchased the Telemics' system based on the superior features that are recited in the pending claims (i.e., the Telemics system is self commissioning and that each unit automatically associates with its neighbor units to learn and maintain its communication as the system builds and regulates itself). Furthermore, the purchase decision was not made by coercion or on other marketing factors since the L.A. Letter states they purchased the system after their extensive research showed that no other available products provided the compelling feature set provided by the Telemics system.

With regard to the evidence of commercial success, it should be noted that the Federal Circuit has stated that objective evidence of commercial success may often be the most probabtive and cogent evidence in the record.

> [O]bjective evidence such as commercial success, failure of others, long-felt need, and unexpected results must be considered before a conclusion on obviousness is reached. ... Indeed, as then Chief Judge Markey said in *Stratoflex, Inc. v. Aeroquip Corp.* ... `evidence of secondary considerations may often be the most probative and

> cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art is not.' In spite of the importance that the secondary considerations of commercial success, long felt need, and failure of others played in the considerations of both the PTO and the [trial court], [the infringer] conspicuously fails to address them."

See *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559 (Fed. Cir. 1992)

Therefore, in the instant case, where the office action has essentially pieced together the prior art based on the applicants' disclosure without proper motivation to arrive at the claimed invention, this objective evidence of non-obviousness is particularly cogent and probative. Accordingly, applicants respectfully request that the applied obviousness rejections be reconsidered and withdrawn.

The dependent claims are also patentable for at least the same reasons as the respective independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole.

**Conclusion**

In view of the foregoing amendments and remarks, applicants believe the application is now in condition for allowance. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is encouraged to contact the undersigned attorney at the local telephone number below.

**Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.**

Respectfully submitted,

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Attached: Declaration Under Title 37 C.F.R. §1.32 with attachment